SEQUENCE LISTING

<110> Council of Scientific and Industrial Research

<120> A chemically synthesized artificial promoter for high level expression of transgenes and a method for its synthesis

<130> Q52511

<140> 09/263,692
<141> 1999-03-05

<150> 3322/Del/98
<151> 1998-11-09

<160> 20

<170> PatentIn version 3.0

<210> 1
<211> 452
<212> DNA
<213> Artificial

<220>
<223> synthetic DNA promoter sequence

<400> 1
gtcgaccatc atttgaaagg gcctcggtaa taccattgtg gaaaaagttg gtaatacgga   60

aaaagaagat tcatcatcca gaaaaggtgt ggaaaagttg tggattgcgt ggaaaaagtt   120

cgatctgacc atctctagat cgtggaaaaa gttcacgtaa gcgcttacgt acatatgtgg   180

attgtggaaa aagaagacgg aggcatcggt ggaaaaagaa gcttgtacgc tgtacgctga   240

cgatagatag atacacgtgc acgcgtccac ttgacgcaca attgacgcac aatgacgcca   300

cttgacgcta cttcactata tataggaagt tcatttcatt tggaatggac acgtgttgtc   360

atttctcaac aattaccaac aacaacaaac aacaaacaac attatacaat tactatttac   420

aattacatct agataaacaa tggcttcctc ca   452

<210> 2
<211> 18
<212> DNA
<213> Artificial

<220>
<223> TATA context for highly expressed genes

<220>
<221> misc_feature

<223> "n" may be a, c, g, or t

<400> 2
ytwyntcact atatatag   18

<210> 3
<211> 18
<212> DNA
<213> Artificial

<220>
<223> TATA context for lowly expressed genes

<220>
<221> misc_feature
<223> "n" may be a, c, g, or t ·

<400> 3
tttnnnnttt atannnat   18

<210> 4
<211> 7
<212> DNA
<213> Artificial

<220>
<223> transcription start site context

<220>
<221> misc_feature
<223> "n" may be a, c, g, or t

<400> 4
annnnca   7

<210> 5
<211> 46
<212> DNA
<213> Artificial

<220>
<223> minimal domain (b)

<400> 5
ccacttgacg cacaattgac gcacaatgac gccacttgac gctact   46

<210> 6
<211> 46

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<212>   DNA
<213>   Artificial

<220>
<223>   domain I

<400>   6
gcttgtacgc tgtacgctga cgatagatag atacacgtgc acgcgt                46


<210>   7
<211>   8
<212>   DNA
<213>   Artificial

<220>
<223>   domain II(a)

<400>   7
rrrrrrrr                                                            8


<210>   8
<211>   6
<212>   DNA
<213>   Artificial

<220>
<223>   domain II(b)

<400>   8
cwwcww                                                              6


<210>   9
<211>   8
<212>   DNA
<213>   Artificial

<220>
<223>   domain II(c)

<400>   9
ggtaatac                                                            8


<210>   10
<211>   16
<212>   DNA
<213>   Artificial

<220>
<223>   domain II(d)
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<400> 10
acryaagcgc ttacgt   16

<210> 11
<211> 22
<212> DNA
<213> Artificial

<220>
<223> domain III

<400> 11
cgatctgacc atctctagat cg   22

<210> 12
<211> 27
<212> DNA
<213> Artificial

<220>
<223> region between minimal promoter (a) and transcription start site

<400> 12
ggaagttcat ttcatttgga atggaca   27

<210> 13
<211> 89
<212> DNA
<213> Artificial

<220>
<223> 5' untranslated leader region

<400> 13
acgtgttgtc atttctcaac aattaccaac aacaacaaac aacaaacaac attatacaat   60

tactatttac aattacatct agataaaca   89

<210> 14
<211> 20
<212> DNA
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<223> translational initiation codon context for highly expressed genes

<220>
<221> misc_feature
<223> "n" may be a, c, g, or t

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<400>  14
atmaacaatg gctnccncna                                                    20


<210>  15
<211>  17
<212>  DNA
<213>  Artificial

<220>
<223>  translational initiation codon context for lowly expressed genes


<220>
<221>  misc_feature
<223>  "n" may be a, c, g, or t


<400>  15
ganatggngn ngnnana                                                       17


<210>  16
<211>  4
<212>  PRT
<213>  Artificial

<220>
<223>  N-terminal amino acids

<400>  16

Met Ala Ser Ser
1

<210>  17
<211>  58
<212>  DNA
<213>  Artificial

<220>
<223>  primer for introduction of ATG context into synthetic DNA promote
       r sequenc

<400>  17
aattacatct agataaacaa tggcttcctc cgtagaaacc ccaacccgtg aaatcaaa        58


<210>  18
<211>  13
<212>  DNA
<213>  Artificial

<220>
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<223> domain I(a)

<400> 18
cacgtgcacg cgt   13

<210> 19
<211> 12
<212> DNA
<213> Artificial

<220>
<223> domain I(b)

<400> 19
gatagataga ta   12

<210> 20
<211> 21
<212> DNA
<213> Artificial

<220>
<223> domain I(c)

<400> 20
gcttgtacgc tgtacgctga c   21